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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,040	11/14/2001	John C. Pederson	N47.2-10241	8123
490	7590	01/12/2004		
VIDAS, ARRETT & STEINKRAUS, P.A. 6109 BLUE CIRCLE DRIVE SUITE 2000 MINNETONKA, MN 55343-9185			EXAMINER MULLEN, THOMAS J	
			ART UNIT 2632	PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,040

Applicant(s)

PEDERSON ET AL.

Examiner

Thomas J. Mullen, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,5,6,7. 6) ☐ Other: _____

1. The drawings are objected to because:

- (i) reference numeral 90 should be added to Fig. 3 to denote the overall "gyrator";
- (ii) reference numeral 480 should be added to Figs. 31-32 to denote the overall "modular light support";
- (iii) reference numeral 440 should be added to Fig. 41 to denote the "brace";
- (iv) in Fig. 53, a lead should be added connecting blocks 50 and 602 (see page 66, lines 27-29 of the specification); and
- (v) in Fig. 69, both occurrences of "71" (used to denote a cross-sectional view in another figure) should be --70--.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because at least reference characters 810, 824, 864, 866 and 868 have been used to designate multiple disclosed elements (see Figs. 63,66,67,81,82, and pages 74,75,83,88,90,95); for example, numeral 810 designates both a gear in Fig. 66 (see page 75, line 8) and "sectors" of LED sources in Fig. 82 (see page 88, lines 21-22). Care should be taken to remove any other instances which may exist in the disclosure of dual usage of a given reference character, in addition to those specified above.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

- 54 (page 34, line 25--note that there is no depiction of a "circuit board" in Figs. 11A-C);
- Q10 (page 34, line 29--note that Fig. 11A includes an element labeled "Q0" rather than "Q10");
- 896 (page 113, line 16--note Fig. 71);

914 (page 121, line 30--note that there appear to be no "positional receivers" shown in Fig. 71); and

922 (page 123, line 10--note that Fig. 73 only shows one "vessel").

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(o) because the blank boxes in Figs. 52-55, corresponding to disclosed elements 30, 50, 55, 602, 606 and 612, lack "descriptive legends".

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the functions carried out by the "controller", as set forth in the last 8 lines of claim 1, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Figs. 11A-11C--which appear to be the only "circuit" diagrams within the drawings--show "controller circuitry", including a microprocessor, groups of LEDs and various transistors (see pp. 34-37 of the specification), but fail to show how the "controller" carries out the function of "simultaneously creat(ing)" a first light signal and a second light signal (e.g., where two different outputs from electronic and/or optical elements respectively denote the "created" first and second light signals); the function of combining these light signals, such that the second light signal is "within" the first light signal; or the function of "processing data into" the second light signal. It is noted that certain embodiments include multiple "controllers" (note e.g. first controller 814, discussed starting on p. 88; second controller 826, discussed starting on p. 89; and third controller 934, discussed starting on p. 126), but these multiple-controller embodiments are not shown in the form of a schematic or block diagram (analogous to Figs. 11A-11C, but perhaps without showing the transistors, resistors, power supply, etc) which would depict the controllers

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and the communication of signals therebetween and/or communication of signals to/from other elements such that the above-noted claimed functions are shown.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Errors noted by the examiner include:

page 1, line 18, it appears that "vehicles" should be --vehicle's-- or --vehicles'--;

page 1, line 25, it appears that "form" should be --from--;

page 1, lines 25-26, it appears that "over heated" (two words) should be --overheated-- (one word) or --over-heated-- (one hyphenated word);

page 9, line 1, "described" is misspelled;

page 29, the "Brief Description" of Figs. 16, 18 and 20 should include a word or phrase such as "conventional", "prior art", etc., since these Figs. are labeled "Prior Art" in the drawings;

page 32, line 15, "and" should be --an--;

page 33, line 8, the comma after "90" should be deleted;

page 57, line 13, it appears that "270" should be --370--;

page 58, line 9, either "source" should be --sources--, or "are" should be --is--;

page 60, line 10, it appears that "fig." should be either --Fig.-- or --FIG.--;

page 63, line 25, it appears that "487" should be --FIG. 47--;

page 80, line 13, "a electrical" should be --an electrical--;

page 86, line 9, "an free" should be --a free--;

page 86, line 23, "vary" should be --very--;

page 86, line 23, it appears that after "power" should be inserted --supply-- (note the similar language on lines 25-26);

page 92, line 17, it appears that "predominately" should be --predominantly--;

page 94, line 7, "a audible" should be --an audible--; and

page 138, line 17, "73 through 75" should be --78 through 80--.

7. Appropriate mention of, or reference to, a specific drawing figure(s) is lacking in certain instances in the specification, i.e. where a particular sentence or paragraph refers to one or more elements which are uniquely found in the specific drawing figure(s). It is considered that identifying the relevant drawing figures in these instances would make it easier for one reading the specification (in conjunction with what is shown in the drawings) to understand the disclosed invention; these instances include at least the following:

"reflector 370" (page 51, line 21) refers to an element shown in Figs. 26-30, but no mention of these Figures is made in the associated sentence or paragraph;

"transparent cover 324" (page 51, line 28) refers to an element shown in Figs. 31-32; a signaling device being "attached to the dashboard of (a) motor vehicle" (page 93, line 22) appears to be best shown in Fig. 81;

"hand held unit 852" (page 95, line 25) refers to an element shown in Fig. 85;

"license plate 836" (page 98, line 10) refers to an element shown in Figs. 69-70;

a light signaling system being "incorporated into aircraft" (page 100, lines 10-11) refers to an embodiment shown in Fig. 71;

"visual display on a screen integral to a cockpit" (page 113, line 12) appears to be best shown in Fig. 84;

"first vessel 916" (page 123, line 2) refers to an element shown in Fig. 73;

"subway, bus, and/or mass transit application" appears to be best shown in Figs. 74 and 77;

"OPTICOM device 942" (page 128, line 21) refers to an element shown in Fig. 67;

"railroad crossing application" (page 130, line 9) refers to an embodiment shown in Figs. 75-76;

"urban suburban communication system 966" (page 132, line 27) refers to a system shown in Fig. 74 (and may also be applicable to Fig. 77); and

"snowplows" (page 137, line 31) refers to an element shown in Fig. 72.

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8. Claims 16 and 34 are objected to under 37 CFR 1.75(a) for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16, line 3, "as" should be --an--.

At the end of claim 34 should be inserted a period.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 8-9, it is unclear what is meant by creating a second light signal "within" a first light signal.

At the end of claim 1, it is unclear what is meant by "processing" data "into" a light signal.

11. Claims 1-34 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The art cited by applicant is made of record. PCT publications 99/49446 and 99/49435, UK publication 2111270, Tymes (US 5,193,201), Knockeart (US 5,552,780) and Kimoto et al (US 5,546,496) are cited to further show the state of the art.


13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Mullen, Jr. whose telephone number is 703-305-4382. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4 PM. The examiner can also be reached on alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu, can be reached on (703) 308-6730. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

TJM


Thomas J. Mullen, Jr.
Primary Examiner
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